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# The Increase in Food Prices Between 2007 and 2012

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| | |
|---|---|
| . | not available for any reference period |
| .. | not available for a specific reference period |
| ... | not applicable |
| 0 | true zero or a value rounded to zero |
| $0^s$ | value rounded to 0 (zero) where there is a meaningful distinction between true zero and the value that was rounded |
| $^p$ | preliminary |
| $^r$ | revised |
| x | suppressed to meet the confidentiality requirements of the *Statistics Act* |
| $^E$ | use with caution |
| F | too unreliable to be published |
| * | significantly different from reference category ($p < 0.05$) |

# The Increase in Food Prices Between 2007 and 2012

*by Anne-Marie Rollin*

This article in the *Economic Insights* series looks at the increase in food prices that has taken place worldwide since 2007. It answers the following questions: How have food prices evolved in Canada and in the rest of the world since 2007? How do the recent trends in Canada compare to previous episodes of rising food prices?

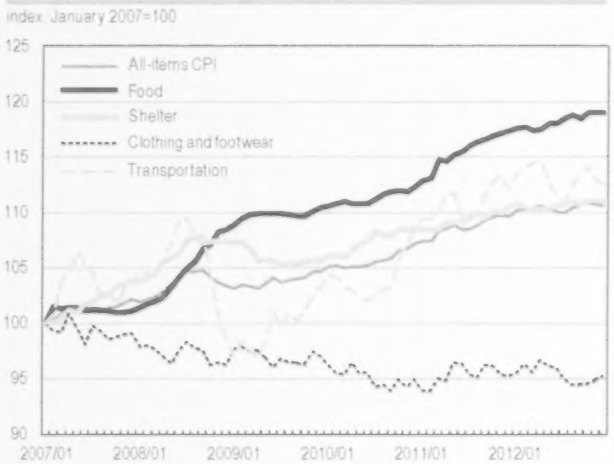
Over the last few years, food prices have received increasing attention. This is partly the result of the sharp increase in worldwide food prices in 2007-2008, during which international food prices increased by 58% over two years.[1] In response, organizations concerned about food security, such as the World Bank and the Food and Agriculture Organization of the United Nations (FAO), have monitored food prices closely.

## A relative increase

For Canada, food price inflation tended to be higher than the All-Items Consumer Price Index (CPI) inflation between 2007 and 2012 (Chart 1). However, the period from January 2008 to January 2009 corresponded to a particularly strong increase in food prices (7.4%). This time period is distinctive in that the All-items CPI actually *decreased* steadily between October 2008 and January 2009 in the wake of the worldwide economic downturn. The resulting gap in the cumulative increase since 2007 between the food and All-items CPI observed in January 2009 was still present in December 2012, and even widened slightly starting in mid-2011.

Prices of food in Canada have increased faster than any other major component of the CPI since 2007. Between January 2007 and December 2012, food prices rose by a cumulative 19.0%, while the All-items CPI excluding food gained a cumulative 10.7%. Over this period, food prices grew at an average annualized rate of 3.5%, compared to 2.1% for the All-items CPI.

**Chart 1**
**Monthly movements in selected major components of the Canadian Consumer Price Index, seasonally adjusted, January 2007 to December 2012**




Source: Author's calculations using Statistics Canada, CANSIM table 326-0022.

1 Derived from the FAO Food Price Index

This relative price differential had a greater impact on those Canadian households that allocate a larger proportion of their expenditures to food. This is, for example, generally the case of households with lower incomes, households headed by seniors, and households living in less populated areas, where market competition is less prevalent.[2]

## A widespread increase

The general increase in food prices affected the vast majority of food items in Canada. Indeed, prices of all the food product groups tracked by the CPI increased faster than the All-items CPI excluding food between 2007 and 2012 (Table 1). This is also true of all product subgroups under the category 'food purchased from stores' with the exception of 'seafood and other marine products'. The cumulative increase was greater than 25% for six of these product subgroups: bakery products, cereal products (excluding infant food), nuts, sugar and confectionery, fats and oil, and coffee and tea. This represented an average annualized increase above 4.5% for each of these six product subgroups.

The absolute and relative rise in food prices has not been restricted to Canada. Many other countries have experienced an upsurge in food prices over recent years. The Organization for Economic Cooperation and Development (OECD) reports consumer food price indices for 39 countries (34 OECD members and 5 non-members). Among those 39 countries, 24 were subject to cumulative food price inflation greater than 15% between 2007 and 2012, which corresponded to an average annualized growth rate above 2.5% (Table 2). All of these 24 countries experienced food price inflation greater than overall price inflation.

The FAO food price index, which tracks 55 commodity quotations, gained a cumulative 33.3% between 2007 and 2012. This index consists of five commodity groups: meat, dairy, cereals, oils, and sugar. The cumulative increases for oils, cereals, and meat were all above 30% between 2007 and 2012. The price of sugar, an ingredient present in many processed-food products, more than doubled over this time period.

No single factor explains why the increase in food prices is global and widespread. Potential drivers include a generalized increase in global demand, low international stock-piles, especially for grains, high energy and fertilizer prices, adverse weather, which lowers production in some years, the intensification of the use of crops such as maize to produce biofuels, and trade policies such as export bans.[3]

Not only have food prices been higher since 2007, but prices of major food grains have also been more volatile than in the preceding two decades.[4]

## Previous episodes of food price inflation in Canada

One of the most notable episodes of food price inflation in Canada started in 1972, and lasted until 1982, with an average annual increase of 10.9%. This episode was associated with the creation of the Food Prices Review Board in May 1973, which monitored price movements of selected food items until 1976.[5] Many other countries also experienced high food price inflation in the 1970s in the aftermath of the first Oil Crisis.[6]

**Table 1**
**Percent cumulative increase in Canadian consumer food prices between 2007 and 2012 for all categories, groups, and subgroups under the Consumer Price Index (CPI) major component 'food'**

| Product category, group or sub-group | percent increase |
|---|---|
| **Food purchased from stores** | **18.0** |
| **Meat** | **18.8** |
| Fresh or frozen meat (excluding poultry) | 21.9 |
| Fresh or frozen poultry meat | 16.6 |
| Processed meat | 16.3 |
| **Fish, seafood and other marine products** | **11.7** |
| Fish | 13.6 |
| Seafood and other marine products | 5.7 |
| **Dairy products and eggs** | **13.4** |
| Dairy products | 12.4 |
| Eggs | 25.8 |
| **Bakery and cereal products (excluding infant food)** | **27.3** |
| Bakery products | 27.0 |
| Cereal products (excluding infant food) | 27.2 |
| **Fruit, fruit preparations and nuts** | **13.1** |
| Fresh fruit | 12.3 |
| Preserved fruit and fruit preparations | 10.4 |
| Nuts | 32.6 |
| **Vegetables and vegetable preparations** | **14.9** |
| Fresh vegetables | 12.6 |
| Preserved vegetables and vegetable preparations | 22.9 |
| **Other food products and non-alcoholic beverages** | **19.0** |
| Sugar and confectionery | 26.1 |
| Fats and oils | 28.7 |
| Coffee and tea | 26.8 |
| Condiments, spices and vinegars | 16.5 |
| Other food preparations | 17.0 |
| Non-alcoholic beverages | 15.2 |
| **Food purchased from restaurants** | **14.5** |
| **Food purchased from table-service restaurants** | **14.8** |
| **Food purchased from fast food and take-out restaurants** | **13.4** |
| **Food purchased from cafeterias and other restaurants** | **14.5** |
| All-items CPI excluding food | 7.6 |

Source: Author's calculations using Statistics Canada, CANSIM table 326-0021.

2 See Statistics Canada's CANSIM tables 203-0021 to 203-0026, which present estimates from the Survey of Household Spending (SHS) for the 2010 reference year.
3 See World Bank (2012).
4 See World Bank (2012).
5 See Harnarine (1993*b*).
6 Historical food price data are available for some OECD member countries. The following countries experienced a prolonged period of high food price inflation starting in 1972 or 1973: the United States, the United Kingdom, France, Italy, Portugal, Denmark, Finland, Sweden, and Japan.

**Table 2**
**Percent cumulative increase in food and All-items Consumer Price Index (CPI) between 2007 and 2012, selected countries monitored by the Organization for Economic Cooperation and Development (OECD)**

| Country | Food | All-items CPI | Difference |
|---|---|---|---|
| Russian Federation | 66.9 | 54.3 | 12.6 |
| Indonesia | 57.3 | 32.9 | 24.4 |
| Iceland | 56.5 | 45.5 | 11.0 |
| Turkey | 55.2 | 47.7 | 7.5 |
| Brazil | 49.3 | 30.9 | 18.4 |
| South Africa | 46.8 | 36.4 | 10.4 |
| China | 45.2 | 17.6 | 27.6 |
| Chile | 43.5 | 17.8 | 25.7 |
| Mexico | 37.1 | 24.1 | 13.0 |
| Korea | 35.1 | 17.7 | 17.4 |
| Hungary | 33.9 | 27.2 | 6.7 |
| United Kingdom | 29.5 | 17.5 | 12.0 |
| Estonia | 28.6 | 23.9 | 4.7 |
| Poland | 24.5 | 19.7 | 4.8 |
| Slovenia | 21.5 | 13.4 | 8.1 |
| New Zealand | 21.1 | 14.2 | 6.9 |
| Israel | 20.8 | 16.8 | 4.0 |
| Finland | 19.6 | 12.0 | 7.6 |
| Canada | 18.1 | 9.2 | 8.9 |
| Czech Republic | 17.8 | 14.8 | 3.0 |
| Denmark | 17.0 | 12.8 | 4.2 |
| Slovak Republic | 17.0 | 15.5 | 1.5 |
| Austria | 15.2 | 11.8 | 3.4 |
| United States | 15.2 | 10.7 | 4.5 |

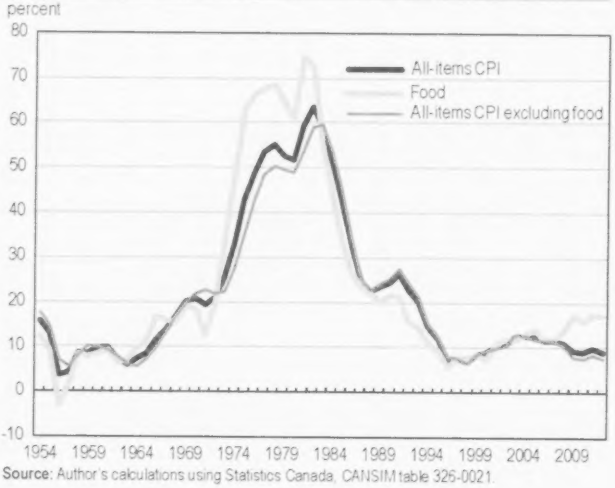
**Note:** The OECD food estimates exclude food purchased from restaurants.

**Source:** Author's calculations using OECD CPI data available in the Main Economic Indicators (MEI) database.

The more recent increase in food price inflation is not as severe as the rise that occurred in the 1970s. During the first five years of the current episode, food prices rose a cumulative 17.0% (Chart 2). This is much lower than the cumulative 67.7% rate observed during the first five years of the 1970s episode of food price inflation. Also, Canadian households have been allocating a smaller share of their expenditures to food in recent years (slightly more than 10%[7]) than was the case in the 1970s (more than 20%[8]).

During both episodes, 1972 to 1982 and 2007 to the present, food prices increased faster than the All-items CPI. In the 1970s, the price of most commodities rose substantially at the time of the first Oil Crisis.[9] What is different this time is that food price inflation increased while the All-items CPI inflation rate slowed at the end of 2008 in the midst of the global economic slowdown. The increase in the All-items CPI has remained lower than the increase in the food price index since then.

**Chart 2**
**Five-year cumulative change in prices in Canada, food, All-items Consumer Price Index (CPI) and All-items Consumer Price Index (CPI) excluding food, 1954 to 2012**




**Source:** Author's calculations using Statistics Canada, CANSIM table 326-0021.

7 See Statistics Canada (2010), Table 1, p. 16.
8 See Statistics Canada (2009), Chart 1.1, p. 12.
9 See Harnarine (1993*a*).

## Conclusion

The current episode is part of a longer-term increase in food prices in Canada. After increasing in the 1970s and early 1980s, food price inflation slowed significantly during the following decade, to reach a low in the early 1990s. Since then, food price inflation in Canada has tended to accelerate.[10]

As is the case for many other countries, prices of food in Canada have increased markedly in both absolute and relative terms since 2007. This food price inflation is a global phenomenon, widespread across many countries and commodities. While the present increase in food prices in Canada is not unprecedented, the five-year cumulative food price inflation experienced between 2007 and 2012 is one of the highest experienced in twenty years.

10. Chart 2 was also done using a five-year moving average of annual changes instead of a five-year cumulative change. The trend over the entire period is the same. Starting in 2009, the five-year moving average for food has been above 3.0%, compared to less than 2.0% for the All-items CPI.

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